

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A method for processing system messages including data at an electronic device having at least a full power mode and a low power mode, the electronic device including device circuitry that is in a powered up state in the full power mode and in a powered down state or a powered up state in the low power mode, the method comprising the steps of:

receiving at least one system message including data for processing by the electronic device while the electronic device is in the low power mode;

generating a message available indicator responsive to the at least one system message;

generating a process message signal responsive to at least one of (i) the message available indicator and (ii) the data of the at least one system message;

transitioning the device circuitry within the electronic device from the powered down state to the powered up state while remaining in the low power mode responsive to the process message signal; and

processing the data of the at least one system message using the device circuitry in the powered up state while in the low power mode.

2. (Original) The method of claim 1, further comprising the step of:

transitioning the device circuitry from the powered up state to the powered down state after processing the data of the at least one system message.

3. (Original) The method of claim 2, further comprising the step of:

determining if additional system messages including data are received during the processing of the data of the at least one system message;

wherein said processing step further comprises processing the data of each of the additional system messages prior to transitioning from the powered up state to the powered down state.

4. (Original) The method of claim 1, wherein the at least one system message is received via message circuitry and wherein the step of generating the message available indicator comprises the steps of:

polling the message circuitry for the at least one message; and

generating the message available indicator responsive to polling the message circuitry if the at least one message is available.

5. (Original) The method of claim 1, wherein the at least one system message is received via message circuitry and wherein the message available indicator is an interrupt generated by the message circuitry responsive to the at least one system message.

6. (Original) The method of claim 1, wherein the step of generating the process message signal comprises the steps of:

identifying a priority level for the data of each of the at least one system messages; and

generating the process message signal responsive to system message data having a first priority level;

wherein system messages including data having a second priority level are stored for processing when the electronic device enters the full power mode.

7. (Original) The method of claim 1, wherein the step of generating the process message signal comprises the steps of:

identifying one or more of the at least one system messages including data containing new information; and

generating the process message signal responsive to the new information system message data;

wherein system messages including data without new information are discarded.

8. (Currently Amended) An apparatus for processing system messages including data received from a service provider, the apparatus having a full power mode and a low power mode, the apparatus comprising:

message circuitry configured to receive at least one system message and to generate a message available indicator responsive to receipt of the at least one system message;

interface circuitry coupled to the message circuitry, the interface circuitry configured to receive at least one system message and to generate a process message signal responsive to the at least one system message; and

device circuitry coupled to the interface circuitry, the device circuitry having a powered up state when the apparatus is in the full power mode and both a powered down state and a powered up state when the apparatus is in the low power mode, the device circuitry initially configured in the powered down state when the apparatus is in the low power mode and is further configured to transition to the powered up state while the apparatus remains in the low power mode responsive to the receipt of the process message signal from the interface circuitry.

9. (Original) The apparatus of claim 8, wherein the device circuitry comprises:

a first processor configured to receive and process the process message signal when the device circuitry is in the powered down state, the first processor generating a power up signal responsive to receipt of the process message signal; and

a second processor coupled to the first processor, the second processor having a processing state and a standby state, the second processor initially configured in the standby state when the apparatus is in the low power mode and is further configured to transition to the processing state to process the at least one system message responsive to the power up signal.

10. (Original) The apparatus of claim 8, wherein the device circuitry is further configured to transition from the powered up state to the powered down state after processing the at least one system message.

11. (Original) The apparatus of claim 8, wherein the interface circuitry is configured to poll the message circuitry to determine if the at least one message is available, receive

a message available indicator if the at least one system message is available, and generate the process message signal responsive to the message available indicator.

12. (Original) The apparatus of claim 8, wherein the message available indicator is an interrupt generated by the message circuitry and wherein the interface circuitry is configured to generate the process message signal responsive to the interrupt.

13. (Original) The apparatus of claim 8, wherein the interface circuitry comprises:

a memory configured to store at least a portion of the at least one system message; and

a processor coupled to the memory, the processor configured to generate the process message signal responsive to a predefined portion of the memory being filled by the at least one system message.

14. (Original) The apparatus of claim 13, wherein the processor is configured to process the at least one system message to identify a priority level for each system message and wherein the processor generates the process message signal responsive to system messages having a first priority level and stores system messages having a second priority level in the memory for processing when the apparatus enters the full power mode.

15. (Original) The apparatus of claim 8, wherein the interface circuitry is configured to process the at least one system message to identify new system message data and wherein the interface circuitry generates the process message signal responsive to the new system message data and discards other system message data.

16. (Original) The apparatus of claim 8, wherein the electronic device is a television receiver.

17. (Currently Amended) A system for processing system messages including data at an electronic device having at least a full power mode and a low power mode, the electronic device including device circuitry that is in a powered up state in the full power mode and in a powered down state or a powered up state in the low power mode, the system comprising:

means for receiving at least one system message including data for processing by the electronic device while the electronic device is in the low power mode;

means for generating a message available indicator responsive to the at least one system message;

means for generating a process message signal responsive to at least one of (i) the message available indicator and (ii) the data of the at least one system message;

means for transitioning the device circuitry within the electronic device from the powered down state to the powered up state while the system remains in the low power mode responsive to the process message signal; and

means for processing the data of the at least one system message using the device circuitry in the powered up state while the system remains in the low power mode.

18. (Original) The system of claim 17, further comprising:

means for transitioning the device circuitry from the powered up state to the powered down state after processing the data of the at least one system message.

19. (Original) The system of claim 18, further comprising:

means for determining if additional system messages including data are received during the processing of the data of the at least one system message;

wherein said processing means further comprises means for processing the data of each of the additional system messages prior to transitioning from the powered up state to the powered down state.

20. (Original) The system claim 17, wherein the at least one system message is received via message circuitry and wherein the means for generating the message available indicator comprises:

means for polling the message circuitry for the at least one message; and

means for generating the message available indicator responsive to the polling means if the at least one message is available.

21. (Original) The system of claim 17, wherein the message available indicator is an interrupt.

22. (Original) The system of claim 17, wherein the means for generating the process message signal comprises:

means for identifying a priority level for the data of each of the at least one system messages; and

means for generating the process message signal responsive to system message data having a first priority level;

wherein system messages including data having a second priority level are stored for processing when the electronic device enters the full power mode.

23. (Original) The system of claim 17, wherein the means for generating the process message signal comprises:

means for identifying one or more of the at least one system messages including data containing new information; and

means for generating the process message signal responsive to the new information system message data;

wherein system messages including data without new information are discarded.